



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2019-0050; Product Identifier 2018-NE-35-AD; Amendment 39-19551; AD 2019-02-04]**

**RIN 2120-AA64**

**Airworthiness Directives; Engine Alliance Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are superseding Airworthiness Directive (AD) 2018-22-05, which applied to Engine Alliance (EA) GP7270, GP7272, and GP7277 turbofan engines with a certain high-pressure turbine (HPT) case installed. AD 2018-22-05 required removal of affected HPT stator cases (HPT cases) from service and their replacement with a part eligible for installation. This AD retains these requirements, reduces the compliance times for the removal and replacement of certain HPT cases, and identifies additional affected parts that must be removed and replaced. This AD was prompted by the discovery of a quality escape at a manufacturing facility involving unapproved welds on HPT cases. Subsequent additional findings suggested the need for an updated risk analysis, resulting in reduced compliance times for those parts and the identification of additional affected parts. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of November 23, 2018 (83 FR 55816, November 8, 2018).

We must receive any comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Engine Alliance, 411 Silver Lane, East Hartford, CT 06118; phone: 800-565-0140; email: [help24@pw.utc.com](mailto:help24@pw.utc.com); website: [www.engineallianceportal.com](http://www.engineallianceportal.com). You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7759. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0050.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0050; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Matthew Smith, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7735; fax: 781-238-7199; email: [matthew.c.smith@faa.gov](mailto:matthew.c.smith@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued AD 2018-22-05, Amendment 39-19478 (83 FR 55816, November 8, 2018) (“AD 2018-22-05”), for EA GP7270, GP7272, and GP7277 turbofan engines with a certain HPT case installed. AD 2018-22-05 required removal of affected HPT cases from service and their replacement with a part eligible for installation. AD 2018-22-05 was prompted by the discovery of a quality escape at a manufacturing facility involving unapproved welds on HPT cases. We issued AD 2018-22-05 to address failure of the HPT case, which could result in engine fire and damage to the airplane.

### **Actions Since AD 2018-22-05 Was Issued**

Since we issued AD 2018-22-05, another undocumented weld has been found on a part that was previously considered to have enough manufacturing data to perform an updated life analysis. The new findings created more uncertainty about the manufacturing data, creating the need for an updated risk analysis with the new information. As a result,

we have determined that the remaining cycles allowed on the affected HPT cases must be reduced and additional affected parts were identified that must be removed and replaced.

#### **Related Service Information under 1 CFR part 51**

We reviewed Engine Alliance Alert Service Bulletin EAGP7-A72-401, Revision No. 1, dated December 13, 2018, which describes procedures for removing and replacing the affected HPT case within the identified cycles.

We also reviewed Engine Alliance Service Bulletin EAGP7-72-399, dated June 4, 2018, which describes procedures for removing and replacing the affected HPT case within the specified part cycles since new or part cycles since overhaul.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **FAA's Determination**

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### **AD Requirements**

This AD requires removal of the affected HPT cases from service and their replacement with a part eligible for installation.

#### **FAA's Justification and Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because failure of the HPT case could result in engine fire and damage to the airplane, and the compliance time for the required action is shorter than the time necessary for public comment and publication of the final rule. Additionally, no

domestic operators currently use this product. We find good cause that notice and opportunity for prior public comment are impracticable and unnecessary. In addition, for the reasons stated above, we find that good cause exists for making this amendment effective in less than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2019-0050 and Product Identifier 2018-NE-35-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. We will consider all comments received by the closing date and may amend this final rule because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this final rule.

### **Costs of Compliance**

We estimate that this AD affects 0 engines installed on airplanes of U.S. registry. We estimate the following costs to comply with this AD:

#### **Estimated costs**

| <b>Action</b>        | <b>Labor cost</b>                       | <b>Parts cost</b> | <b>Cost per product</b> | <b>Cost on U.S. operators</b> |
|----------------------|---|-------------------|-------------------------|-------------------------------|
| HPT case replacement | 20 work-hours X \$85 per hour = \$1,700 | \$339,400         | \$341,100               | \$0                           |

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

## **Regulatory Findings**

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2018-22-05, Amendment 39-19478 (83 FR 55816, November 8, 2018), and adding the following new AD:

**2019-02-04 Engine Alliance:** Amendment 39-19551; Docket No. FAA-2019-0050; Product Identifier 2018-NE-35-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD replaces AD 2018-22-05, Amendment 39-19478 (83 FR 55816, November 8, 2018) (“AD 2018-22-05”).

**(c) Applicability**

This AD applies to Engine Alliance (EA) GP7270, GP7272, and GP7277 turbofan engines, with a high-pressure turbine (HPT) stator case (HPT case), part number (P/N) 2060M40G02 or 2137M29G01 installed, and with HPT case serial numbers (S/Ns) listed in Planning Information, Table 1, of Engine Alliance Alert Service Bulletin EAGP7-A72-401, Revision 1, dated December 13, 2018, and in Planning Information, Table 1, of Engine Alliance Service Bulletin EAGP7-72-399, dated June 4, 2018.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 7250, Turbine section.

**(e) Unsafe Condition**

This AD was prompted by the discovery of a quality escape at a manufacturing facility involving unapproved welds on HPT cases. We are issuing this AD to address failure of the HPT case, which could result in engine fire and damage to the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

(1) For HPT cases listed in Planning Information, Table 1, of Engine Alliance Alert Service Bulletin EAGP7-A72-401, Revision No. 1, dated December 13, 2018, remove the affected HPT case from service within the cycles identified in Table 1 of Engine Alliance Alert Service Bulletin EAGP7-A72-401, Revision No. 1, dated December 13, 2018, after the effective date of this AD.

(2) For HPT cases listed in Planning Information, Table 1, of Engine Alliance Service Bulletin EAGP7-72-399, dated June 4, 2018, remove the affected HPT cases from service, using the number of part cycles since new (PCSN) or part cycles since overhaul (PCSO), whichever is less, as specified in Table 1 to paragraph (g)(2) of this AD.



**Table 1 to paragraph (g)(2) of this AD – Compliance times**

| <b>PCSN or PCSO</b> | <b>Remove from service within these cycles after<br/>November 23, 2018 (the effective date of AD 2018-22-05)</b> |
|---------------------|--|
| Fewer than 1000     | 150 cycles.  |
| 1001 to 2000        | 125 cycles.  |
| 2001 to 3000        | 100 cycles.  |
| 3001 to 4000        | 75 cycles.   |
| 4001 to 5000        | 50 cycles.   |
| 5001 or more        | 25 cycles.   |

(3) Replace the removed HPT case with a part eligible for installation before further flight.

**(h) Definition**

For the purpose of this AD, a “part eligible for installation” is any HPT case not identified in paragraph (c) of this AD or an HPT case listed in this AD that has been inspected and repaired by a method approved by the Manager, ECO Branch, FAA.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. You may email your request to ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(j) Related Information**

For more information about this AD, contact Matthew Smith, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7735; fax: 781-238-7199; email: Matthew.C.Smith@faa.gov.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Engine Alliance Alert Service Bulletin EAGP7-A72-401, Revision No. 1, dated December 13, 2018.

(ii) [Reserved]

(4) The following service information was approved for IBR on November 23, 2018 (83 FR 55816, November 8, 2018).

(i) Engine Alliance Service Bulletin EAGP7-72-399, dated June 4, 2018.

(ii) [Reserved]

(5) For service information identified in this AD, contact Engine Alliance, 411 Silver Lane, East Hartford, CT 06118; phone: 800-565-0140; email: help24@pw.utc.com; website: www.engineallianceportal.com.

(6) You may view this service information at FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:  
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on February 5, 2019.

Robert J. Ganley  
Manager, Engine and Propeller Standards Branch,  
Aircraft Certification Service.  
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